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Restoring Function. Maximizing Performance.
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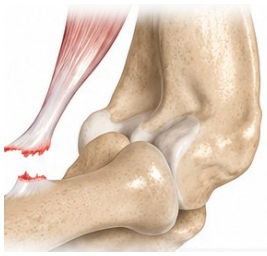
UPPER EXTREMITY CONDITION

Distal Biceps Rupture

Distal Biceps Tendon Tear at the Elbow — Patient Condition Guide



The distal biceps tendon torn from the radius at the elbow · for education; your anatomy may differ

OVERVIEW

A distal biceps rupture is a tear of the biceps tendon where it attaches at the elbow, typically occurring during a forceful lifting motion when the elbow is suddenly straightened against resistance.

ANATOMY

The distal biceps tendon anchors the biceps muscle to the radius bone in the forearm, providing power for elbow flexion and forearm rotation (supination).

SYMPTOMS

- A sudden pop and sharp pain at the front of the elbow
- Bruising down the forearm within a day or two
- A visible bulge in the upper arm ("Popeye" deformity) as the muscle retracts
- Weakness with elbow bending and forearm rotation

DIAGNOSIS

Exam often reveals a palpable gap or an abnormal contour of the biceps. MRI confirms the tear and whether it is complete or partial, guiding treatment planning.

TREATMENT OPTIONS

Complete tears in active patients are generally treated with surgical repair, ideally within a few weeks of injury, to restore strength and function. Partial tears or low-demand patients may be managed non-surgically.

RECOVERY TIMELINE

- Weeks 0–6: brace with limited motion
- Weeks 6–12: progressive active motion
- Months 3–4: strengthening

— Months 4–6: return to heavy lifting and sport

FAQS

Q Do I need surgery for a distal biceps tear?
Most complete tears in active patients benefit from surgical repair to restore full strength, particularly forearm rotation.

Q How soon should surgery be done?
Earlier repair generally gives the best results, since the tendon can retract and become harder to repair over time.

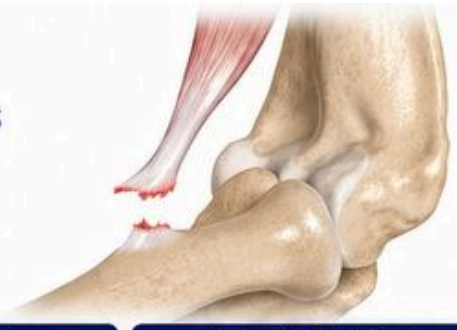
SCAN FOR THE LATEST VERSION ONLINE
robertpettitmd.com/handouts/distal-biceps-rupture.pdf

This handout is for general patient education and does not replace personalized medical advice. Always follow the specific instructions given by Dr. Pettit and your care team.

DISTAL BICEPS TEAR

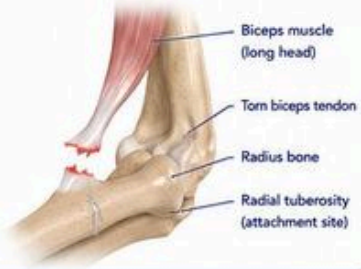
UNDERSTANDING YOUR INJURY & TREATMENT OPTIONS

The biceps muscle in the front of your upper arm has a tendon that attaches to the radius bone in your forearm at the radial tuberosity. A distal biceps tear occurs when this tendon partially or completely tears away from the bone, often during lifting or forceful activities.



ANATOMY

The biceps has two tendons. The long head continues down the arm and attaches to the radius bone at the radial tuberosity.



HOW IT HAPPENS

A sudden, forceful contraction of the biceps muscle while the elbow is partially bent and the forearm is supinated (palm up) can cause the tendon to tear from the bone.

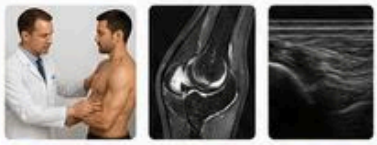
- Lifting heavy objects
- Pulling or jerking motions
- Sports or sudden forceful activity

COMMON SYMPTOMS

- Sudden pop or tearing sensation in the elbow
- Pain and bruising in the front of the elbow
- Weakness with bending the elbow or turning the palm up (supination)
- Visible deformity or a "gap" in the front of the elbow
- Loss of strength, especially with lifting or pulling

DIAGNOSIS

Your doctor will perform a physical exam and may order imaging to confirm the diagnosis and determine the severity.

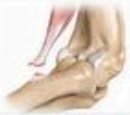


Physical Exam
Tests strength, range of motion, and looks for deformity.

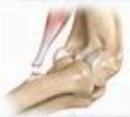
MRI
Best test to confirm the tear and assess retraction.

Ultrasound
May be used to evaluate the tear and assess extent.

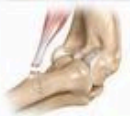
TEAR TYPES



Partial Tear
The tendon is partially torn but still attached to the bone.



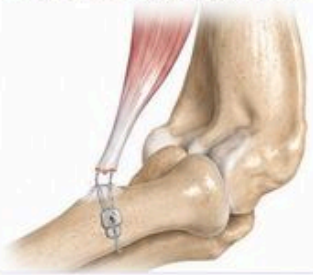
Complete (Retracted) Tear
The tendon is completely torn and has pulled away from the bone.



Chronic Tear
A tear that has been present for several weeks or months.

SURGICAL REPAIR (RETURN TO BONE)

During surgical repair, the torn tendon is reattached to the radial tuberosity using a suture anchor or cortical button device.



TREATMENT OPTIONS

1. NON-SURGICAL TREATMENT (PARTIAL TEARS)

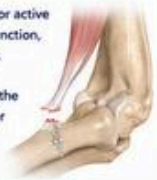
- Rest and activity modification
- Physical therapy
- Anti-inflammatory medications
- Strengthening program

GOAL: Reduce pain and restore strength and function. Not all partial tears heal completely without surgery.

2. SURGICAL TREATMENT (COMPLETE TEARS)

Surgical repair is recommended for active individuals to restore strength, function, and prevent long-term weakness.

The torn tendon is reattached to the radius bone using a suture anchor or cortical button device.



GOAL: Restore anatomy, strength, and function to return to work, sports, and daily activities.

3. POST-OP REHABILITATION (TYPICAL TIMELINE)

- **0–2 WEEKS** — Immobilization in a brace, control pain and swelling, gentle finger/wrist motion.
- **2–6 WEEKS** — Begin gentle elbow range of motion, no lifting or resisted activity.
- **6–12 WEEKS** — Gradual strengthening and light functional activities.
- **3–6 MONTHS** — Progressive strengthening, return to sports/work when cleared.
- **6+ MONTHS** — Return to full, unrestricted activity (typically 6–9 months).

EXERCISES THAT CAN HELP (AFTER SURGERY – AS DIRECTED BY YOUR THERAPIST)

WRIST FLEXION/EXTENSION
Gently bend your wrist up and down.

FOREARM SUPINATION/PRONATION
Turn your palm up and down.

ELBOW FLEXION (AAROM)
Use your other arm or a stick to help bend your elbow.

BICEPS ISOMETRIC
Gently tighten your biceps without moving your elbow.

GRIP STRENGTHENING
Squeeze a soft ball or therapy putty.

GRADUAL STRENGTHENING
Progress to resistance exercises as directed.

PREVENTION TIPS

- Use proper lifting technique
- Warm up before activity
- Improve overall strength and flexibility
- Avoid sudden, jerky movements with heavy loads

WHEN TO SEE A DOCTOR

- Sudden pop or tearing in the elbow
- Weakness or difficulty with lifting or turning the palm up
- Bruising or deformity in the front of elbow
- Pain that does not improve with rest

Scan for exercise videos and more information about distal biceps tears.

This information is for educational purposes only and is not a substitute for professional medical advice. Please consult your orthopedic surgeon for an accurate diagnosis and personalized treatment plan.

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For patient education; your anatomy may differ.